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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,258	09/17/2003	Masami Urano	96790P441	3388

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EXAMINER

LEWIS, MONICA

ART UNIT PAPER NUMBER

2822

DATE MAILED: 04/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/664,258

Applicant(s)

URANO ET AL.

Examiner

Monica Lewis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2-6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 01/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the request for continued examination filed January 27, 2006.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/17/06 has been entered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1 is rejected under 35 U.S.C. 103(a) as obvious over Applicant's Prior Art in view of Bhalla et al. (U.S. Patent No. 6,275,326).

In regards to claim 1, Applicant's Prior Art discloses the following:

- a) a control electrode which supplies a control signal for causing the movable portion to physically move (For Example: See Page 2 Lines 6-21);
- b) a driving circuit (908) which outputs the control signal to the control electrode on the basis of the first electrical signal (For Example: See Figure 20);
- c) a memory (906) which holds an externally input setting value (For Example: See Figure 20);

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d) a processor (905) which generates the first electrical signal on the basis of the setting value held in the memory, and controls output of the control signal from the driving circuit on the basis of the generated first electrical signal and the second electrical signal, thereby controlling operation of the movable portion (For Example: See Figure 20); and

e) the driving circuit, the memory, and the processor are constituted by part of the integrated circuit (For Example: See Figure 20).

In regards to claim 1, Applicant's Prior Art fails to disclose the following:

a) a plurality of units which are formed on said semiconductor substrate and comprise movable portions that physically move on the basis of a first electrical signal.

However, Bhalla et al. ("Bhalla") discloses a plurality of units which are formed on said semiconductor substrate (61) and comprise movable portions that physically move on the basis of a first electrical signal (For Example: See Figure 4). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the semiconductor device of Applicant's Prior Art to include a plurality of units which are formed on said semiconductor substrate and comprise movable portions that physically move on the basis of a first electrical signal gate fingers that are connected to the metal runner at predetermined positions along their lengths as disclosed in Bhalla because it aids in providing position detection (For Example: See Column 1 Lines 45-53).

Additionally, since Applicant's Prior Art and Bhalla are both from the same field of endeavor, the purpose disclosed by Bhalla would have been recognized in the pertinent art of Applicant's Prior Art.

b) a sensor circuit which generates a second electrical signal corresponding to physical motion of the movable portion on the basis of a signal from the sensor electrode.

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However, Bhalla discloses a sensor circuit which generates a second electrical signal corresponding to physical motion of the movable portion on the basis of a signal from the sensor electrode (41) (For Example: See Figure 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the semiconductor device of Applicant's Prior Art to include a sensor circuit which generates a second electrical signal corresponding to physical motion of the movable portion on the basis of a signal from the sensor electrode as disclosed in Bhalla because it aids in providing position detection (For Example: See Column 1 Lines 45-53).

Additionally, since Applicant's Prior Art and Bhalla are both from the same field of endeavor, the purpose disclosed by Bhalla would have been recognized in the pertinent art of Applicant's Prior Art.

Allowable Subject Matter

5. Claims 2-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica Lewis whose telephone number is 571-272-1838. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zandra Smith can be reached on 571-272-2429. The fax phone number for the organization

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where this application or proceeding is assigned is 571-273-8300 for regular and after final communications.

ML

March 18, 2006

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke at the end.